# WILDLIFE AND FISHERIES

## What can I do with this major?

<table>
<thead>
<tr>
<th>AREAS</th>
<th>EMPLOYERS</th>
<th>STRATEGIES</th>
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<tbody>
<tr>
<td><strong>WILDLIFE SCIENCES</strong>&lt;br&gt;Conservation&lt;br&gt;Wildlife Management&lt;br&gt;Resource/Range/Property Management&lt;br&gt;Wildlife Biology and Ecology&lt;br&gt;Wildlife Research&lt;br&gt;Hunting and Game Management&lt;br&gt;Law Enforcement&lt;br&gt;Education/Interpretation</td>
<td>State, city, and county government agencies&lt;br&gt;dealing with natural resources&lt;br&gt;Federal government including:&lt;br&gt;Fish and Wildlife Service&lt;br&gt;Park Service&lt;br&gt;Forest Service&lt;br&gt;Bureau of Land Management&lt;br&gt;Natural Resources Conservation Service&lt;br&gt;Environmental Protection Agency&lt;br&gt;Department of Justice&lt;br&gt;Army Corps of Engineer&lt;br&gt;Wildlife refuges&lt;br&gt;National and international environmental and conservation organizations&lt;br&gt;Zoos, aquariums, and other collections of animals&lt;br&gt;Universities and colleges&lt;br&gt;Non-governmental organizations, e.g., Trout Unlimited, Wild Turkey Foundation</td>
<td>Develop physical stamina, outdoor skills, and comfort being in close proximity with large and small animals. Advanced degrees are often required in these positions, especially for research and biology. Supplement curriculum with additional science courses in relevant areas, e.g., genetics, animal behavior, microbiology. Gain extensive laboratory and research experience. Research requirements for certifications available through the Wildlife Society, e.g., Certified Wildlife Biologist. Seek internships, summer jobs, or volunteer positions to gain experience. Some professionals in the field will begin their careers in temporary jobs. Join related campus organizations such as the Student Wildlife and Fisheries Society. Develop public speaking and conflict management skills through coursework or experience. For law enforcement jobs, be prepared to complete additional officer training and to go through a background check as part of the hiring process. Attain experience with firearms, boat safety, and first aid training. Become familiar with government job application procedures and use your college career center for assistance. Be prepared to relocate to areas with abundant natural resources.</td>
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### AQUATIC SCIENCES

- Aquaculture
- Hatchery Operations Management
- Aquarium Operations Management
- Fisheries Management
- Conservation
- Research
- Biology and Ecology
- Limnology
- Quality Control
- Consulting

#### AREAS

- State, city, and county government agencies dealing with natural resources
- Federal government including:
  - Bureau of Land Management
  - Fish and Wildlife Service
  - Forest Service
  - National Oceanic and Atmospheric Administration
- Government hatcheries
- Private commercial fish farms
- Shellfish operations
- Public and private aquariums
- Non-profit research facilities
- Inspection organizations
- Colleges and universities

#### STRATEGIES

- Gain work experience through internships, summer jobs, or volunteer positions.
- Develop physical stamina, outdoor skills, and comfort being in water.
- Pursue extensive laboratory and research experience by working in faculty laboratories through independent research classes, as a student employee, or through other departmental programs.
- Earn a graduate degree to work in research/biology positions or to qualify for more and advanced opportunities in other areas.
- Research requirements for certification available through the American Fisheries Society.
- With a bachelor's degree, look for entry-level technician positions to begin a career.
- Practice good communication and problem solving skills. Exercise close attention to detail.
- Join related campus organizations such as the Student Fisheries Association.
- Pursue a minor in business if interested in management or self-employment.

### EDUCATION

- Teaching
- Research
- Natural Resource Education
- Extension

#### AREAS

- Nature centers
- Resource management agencies
- Parks and recreation departments
- Camps
- Youth education organizations
- Zoos
- Museums
- Private organizations
- Extension services
- Government agencies
- Universities and colleges

#### STRATEGIES

- Gain experience working with youth through tutoring, interning, or volunteering.
- Learn to work well with all types of people.
- Seek leadership roles in student organizations.
- Develop excellent interpersonal and public speaking skills.
- Earn a Ph.D. to teach in universities and colleges.
- Consider earning a master's degree to be more competitive for resource education positions.
- Maintain a high GPA and secure strong faculty recommendations.
- Be prepared to live in rural communities for extension positions.
### AREAS

**VETERINARY MEDICINE**
Areas of Specialization:
- Small Animal Care
- Large Animal Care
- Public Health
- Laboratory Animal Medicine
- Exotic Animal Care
- Research

### EMPLOYERS

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<tr>
<th>Areas</th>
<th>Employers</th>
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<tr>
<td>Group or private practice</td>
<td>Federal government including:</td>
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<tr>
<td></td>
<td>Department of Agriculture:</td>
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<td></td>
<td>Animal and Plant Health Inspection Service</td>
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<td>Food Safety and Inspection Service</td>
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<td>Department of Interior:</td>
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<td>Fish and Wildlife Service</td>
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<td>Department of Health and Human Services:</td>
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<td>Centers for Disease Control and Prevention</td>
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<td>National Institutes of Health</td>
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<td>Food and Drug Administration's Center for Veterinary Medicine</td>
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<td></td>
<td>State and local government</td>
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<td>Colleges of veterinarian medicine</td>
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<td></td>
<td>Medical schools</td>
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<td>Research laboratories</td>
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<td></td>
<td>Animal food companies</td>
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<td>Inspection services</td>
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<td>Pharmaceutical companies</td>
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<td>Zoos</td>
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<td>Wildlife sanctuaries</td>
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### STRATEGIES

Wildlife and Fisheries can serve as a pre-vet bachelor's degree. Research veterinary programs, take prerequisite courses to meet veterinary school requirements, and prepare for the application process.

Maintain an excellent GPA, particularly in the sciences, and build relationships with faculty. Strong recommendations from professors are needed for professional school.

Pursue extensive laboratory and research experience for research positions.

Gain experience in animal health settings, zoos, wildlife sanctuaries, etc., through volunteer positions, part-time jobs or summer work. Consider working as a veterinary technician.

Develop physical stamina, confidence working with both small and large animals and in various weather conditions.

Plan to work evenings, weekends or on-call for some positions.

Exercise close attention to detail and the ability to respond effectively in emergency situations.

Practice strong interpersonal skills for dealing with animal owners who may be upset.

Consider taking courses in business and communications or pursuing joint MBA/DVM programs, as self-employed veterinarians must effectively promote and manage their own businesses.

Seek active roles in pre-vet and other related clubs.
GENERAL INFORMATION

• As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs, or internships.
• Participate in research programs sponsored by environmental and government organizations. Explore internships with the Student Conservation Association.
• Consider various certification options available through professional associations.
• Earn master’s degree for greater variety and autonomy on the job. Earn a Ph.D. to work on high-level research projects, to direct research programs, to enter high levels of administration, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required.
• The wildlife and fisheries degree can be good preparation for a career in healthcare such as medicine, dentistry, and veterinary science, but professional degrees and licenses are also necessary to practice in these fields.
• Combine an undergraduate degree with a degree in law, business, education, information science, or other discipline to expand career opportunities. Become familiar with the specific entrance exam for graduate or professional schools in your area of interest.
• Learn to work independently and as part of a team.
• Get involved with hobbies that will help you develop relevant skills and expose you to the outdoors, such as hunting, fishing, or bird watching.
• Join professional associations and community organizations, and read related journals to stay abreast of current issues in the field and to develop networking contacts. Actively participate in related campus groups.
• Secure strong relationships and personal recommendations from professors and/or employers.
• Learn federal, state, and local government job application process. The federal government is the largest employer of scientists.
• Gain experience with grant writing and fundraising techniques. Often research must be funded in this manner.